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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/500,735 02/09/00 SHIPMAN

M 685-P-2-USA

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MMC2/0102

EXAMINER

Drummond & Duckworth
4590 MacArthur Boulevard Suite 500
Newport Beach CA 92660

HORDEN, D.	
ART UNIT	PAPER NUMBER

2875

DATE MAILED:

01/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

MMC2/0102

Drummond & Duckworth
4590 MacArthur Boulevard Suite 500
Newport Beach, CA 92660

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
09/500,735	02/09/00	003	HOBDEN, D	2875 01/02/01
First Named Applicant	SHIPMAN, 35 USC 154(b) term ext. = 0 Days.			

TITLE OF INVENTION: KEYBOARD HAVING ILLUMINATED KEYS

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3 685-P-2-USA	362-030.000	A17	UTILITY	YES	\$620.00	04/02/01

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PATENT AND TRADEMARK OFFICE COPY

Notice of Allowability

Application No.

09/500,735

Examiner

David V. Hobden

Applicant(s)

SHIPMAN, MICHAEL

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed on 11/03/2000.
2. ☒ The allowed claim(s) is/are 7-9.
3. ☐ The drawings filed on _____ are acceptable as formal drawings.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

6. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
7. ☒ Applicant MUST submit NEW FORMAL DRAWINGS
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review(PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☒ including changes required by the proposed drawing correction filed 03 November 2000, which has been approved by the examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

8. ☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any reply to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE / SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>5</u> |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance:

Claims 7-9 are allowed.

Prior art discloses a lighted computer keyboard having:

a keyboard housing;

a plurality of key members constructed of a substantially hard non-deformable material, the key members depressably positioned within the keyboard housing, the plurality of key members also including at least twenty-six key members having letters displayed thereon;

- a. an elastic diaphragm underlying the key members for biasing the key members in an upward direction;

Prior art does not disclose:

- a. a circuit board underlying the plurality of key members and the elastic diaphragm, the circuit board being operational to produce signals in response to depression of the key members; and

a luminescent planar sheet for producing light, the luminescent planar sheet positioned between the plurality of key members and the elastic diaphragm, and being optically connected to the key members so as to permit the transmission of light to at least some of the plurality of key members, the luminescent planar sheet also including a plurality of holes underlying the key members for permitting the key members to engage the elastic diaphragm.

He allows because of how the layers (diaphragm, circuit board, planar sheet) are positioned in relation to each other

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b. a substantially translucent elastic diaphragm underlying the key members for biasing the key members in an upward direction;

a circuit board underlying the plurality of key members and the elastic diaphragm, the circuit board being operational to produce signals in response to depression of the key members; and

a luminescent planar sheet for producing light, the luminescent planar sheet underlying the key members and the elastic diaphragm, and being positioned between the elastic diaphragm and the circuit board, the luminescent planar sheet being optically connected to the key members so as to permit the transmission of light to at least some of the plurality of key members.

c. a substantially translucent elastic diaphragm underlying the key members for biasing the key members in an upward direction;

a substantially translucent circuit board underlying the plurality of key members and the elastic diaphragm, the circuit board being operational to produce signals in response to depression of the key members; and

a luminescent planar sheet for producing light, the luminescent planar sheet underlying the key members, the elastic diaphragm, and the circuit board, the luminescent planar sheet being optically connected to the key members so as to permit the transmission of light to at least some of the plurality of key members.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Drawings

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 11/03/2000 have been approved by the examiner.
3. The application having been allowed, formal drawings are required in response to this Office Action.

Conclusion

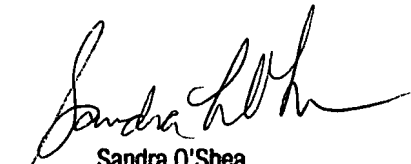
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David V. Hobden whose telephone number is 703-305-4469. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L O'Shea can be reached on 703-305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-8303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0956.



DVH
December 21, 2000



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800